

CLAIMS

What is claimed is:

1. A method for selecting a low power consumption stimulation parameter set from a multiple of stimulation parameter sets, comprising:
 - (a) selecting a stimulation parameter set from a multiple of stimulation parameter sets;
 - (b) providing stimulation using the selected stimulation parameter set;
 - (c) obtaining a value for the level of power consumption of the selected stimulation parameter set;
 - (d) communicating the level of power consumption of the selected stimulation parameter;
 - (e) repeating steps (a) through (d) for each of the stimulation parameter sets; and
 - (f) selecting a stimulation parameter set based, in part, on the level of power consumption.
2. The method of Claim 1 wherein obtaining a value for the level of power consumption of the selected stimulation parameter set comprises:
 - adjusting the stimulation level to find an adequate stimulation level for effective stimulation; and
 - computing the power consumption for the adequate stimulation level.
3. The method of Claim 2 wherein adjusting the stimulation level comprises using a patient controlled joy-stick to adjust the stimulation level.

4. The method of Claim 2 wherein adjusting the stimulation level comprises adjusting the pulse current level.

5. The method of Claim 2 wherein computing the power consumption for the adequate stimulation level comprises using a formula to compute the power consumption as a function of variables including the pulse current level adequate for effective stimulation and an impedance of the stimulation parameter set.

6. The method of Claim 1 wherein each of the stimulation parameter sets of the multiple of stimulation parameter sets is a stimulation configuration unique from the other stimulation parameter set(s).

7. A method for determining a stimulation parameter set based on low power consumption data, comprising:

creating a preliminary display communicating data, wherein the data is associated with power consumption information for at least one preliminary stimulation parameter set;

repeating the following steps to refine the display:

selecting a new set of stimulation parameters based on the data and associated power consumption information;

stimulating a patient using the new set of stimulation parameters; and

associating power consumption information of the selected stimulation parameter set with the data of the display; and

selecting a stimulation parameter set based on the refined display .

8. The method of Claim 7 wherein creating the preliminary display comprises:

repeating the following steps for each of the at least one preliminary stimulation parameter sets:

- selecting a stimulation parameter set from the at least one preliminary stimulation parameter sets;
- providing stimulation using the selected preliminary stimulation parameter set;
- obtaining a value for the power consumption of the selected preliminary stimulation parameter set;
- associating the power consumption value of the selected preliminary stimulation parameter set with the data of the display.

9. The method of Claim 8 wherein the associated power consumption value and information are represented by sound.

10. The method of Claim 8 wherein the associated power consumption value and information are represented visually.

11. The method of Claim 7 wherein selecting a new set of stimulation parameters based on the data and associated power consumption information comprises:

- identifying a potential low power consumption stimulation configuration based on the associated power consumption information.

12. The method of Claim 7 wherein selecting a new set of stimulation parameters based on the data and associated power consumption information comprises:

- identifying a plurality of low power consumption stimulation parameter sets associated with the data on the display; and

selecting a stimulation parameter set from the identified low power consumption stimulation parameter sets.

13. A fitting suite for use by a clinician in fitting a stimulation system to a patient, wherein the suite is adapted to cooperate with at least one implantable electrode array of at least one electrode, comprising:

a programming computer adapted to define stimulation parameter sets wherein the stimulation parameter sets control stimulation provided to the patient by an implantable electrode array; and

a display generated by the programming computer, wherein the display is adapted to communicate power consumption levels of the stimulation parameter sets.

14. The suite of Claim 13 wherein the system further includes a patient programmer, and wherein:

the programming computer is adapted to provide the specified stimulation parameter sets to the patient programmer; and

the patient programmer is adapted to provide the specified stimulation parameter sets to a stimulator, wherein the stimulator provides stimulation pulses to the electrode array.

15. The suite of Claim 13 wherein the system further includes an External Trial Stimulator (ETS) electrically connectable to the implantable electrode array, and wherein the programming computer is further adapted to provide the specified stimulation parameter sets to the ETS.

16. The suite of Claim 13 wherein the programming computer is further adapted to provide navigation cues to the clinician, which cues aid in selecting a possible low power consumption stimulation parameter set.

17. The suite of Claim 13 wherein power consumption levels are communicated and comprise power consumption levels that are adequate for effective stimulation.

18. The suite of Claim 17 wherein the power consumption levels further include estimated power consumption levels that are adequate for effective stimulation using untested stimulation parameter sets.

19. The suite of Claim 13 wherein the programming computer is further adapted to indicate the stimulation parameter set having the lowest power consumption for effective stimulation.

20. The suite of Claim 13 wherein the power consumption levels are computed using a power formula including current level and impedance as variables.

21. A system for selecting a low power consumption stimulation parameter set from a multiple of stimulation parameter sets, comprising:

- means for selecting a stimulation parameter set from a multiple of stimulation parameter sets;
- means for providing stimulation using the selected stimulation parameter set;
- means for obtaining a value for the level of power consumption of the selected stimulation parameter set; and
- means for communicating the level of power consumption of the selected stimulation parameter.